# Government of the District of Columbia Office of the Chief Financial Officer



Natwar M. Gandhi Chief Financial Officer

#### TAX ABATEMENT FINANCIAL ANALYSIS

TO: The Honorable Vincent C. Gray

**Mayor, District of Columbia** 

The Honorable Phil Mendelson

Chairman, Council of the District of Columbia

FROM: Natwar M. Gandhi

**Chief Financial Officer** 

**DATE:** October 19, 2012

SUBJECT: "Autonomous Vehicle Act of 2012"

**REFERENCE:** Bill Number 19-931

#### **Findings**

The motor fuel tax exemption proposed in Section 3 of the Autonomous Vehicle Act of 2012 is not required in order to encourage autonomous vehicles to be owned and operated in the District.

Notwithstanding the findings presented in this analysis, the proposed legislation may have an effect on the District's FY 2012 through FY 2015 budget and financial plan.

## **Background**

The proposed legislation would exempt autonomous vehicles meeting certain standards from the District's motor fuel tax, which is currently set at 23.5 cents per gallon.

An autonomous vehicle is defined as "a vehicle capable of navigating the roadways of the District and interpreting all existing traffic control devices without a driver operating any of the vehicle's control systems."

In order to be permitted on the District's public roadways, the vehicle must:

- 1) Operate without a driver actively manning the controls;
- 2) Have a manual override feature that allows a driver to assume control of the vehicle at any time;

- 3) Have a driver seated in the control seat of the vehicle while in operation, who shall be prepared to take control of the autonomous vehicle at any moment;
- 4) Obey all traffic laws; and
- 5) Operate on alternative fuels<sup>1</sup>.

The requirement to operate on alternative fuels indicates that autonomous vehicles will get well above average miles per gallon of motor fuel.<sup>2</sup> It is also expected that certain autonomous vehicles will also be electric vehicles, which would consume no motor fuel, and would therefore not be subject to the motor fuel tax.

## **Financial Analysis**

The Exemptions and Abatements Information Requirements Act of 2011 requires the analysis provided by the Office of the Chief Financial Officer (OCFO) to contain certain information. The required information is included below.

## Terms of the Exemption or Abatement

The legislation states that any vehicle that meets the District's requirements as an autonomous vehicle, shall be shall be exempt from paying the District's motor fuel tax.

#### Annual Proposed Value of the Exemption

The value of the exemption will vary depending on the miles per gallon and the number of miles driven. The OCFO estimates the proposed value of the exemptions range from zero to 20 cents per day per car, or less than \$80 per year per vehicle.

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Estimate of Value of Motor Fuel Tax exemption per Vehicle	Hybrid/Alternative			Electric	
Motor Fuel Tax per gallon (in dollars)		0.235		0.235	0.235
Estimated Miles Per Gallon		44		44	0
Estimated Miles Driven Per Day		20		40	40
Gallons Per Day		0.45		0.91	0.00
Estimated Tax per day	\$	0.11	\$	0.21	\$0.00
Estimated Annual Exemption Value per Vehicle	\$	38.99	\$	77.98	\$0.00

## Summary of the Proposed Community Benefits

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<sup>&</sup>lt;sup>1</sup> By reference to the federal Energy Policy Act of 1992 (42 U.S.C § 13211(2)), the term "alternative fuel" means methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more (or such other percentage, but not less than 70 percent, as determined by the Secretary, by rule, to provide for requirements relating to cold start, safety, or vehicle functions) by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas, including liquid fuels domestically produced from natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials; electricity (including electricity from solar energy); and any other fuel the Secretary determines, by rule, is substantially not petroleum and would yield substantial energy security benefits and substantial environmental benefits;

<sup>&</sup>lt;sup>2</sup> The Committee on Environment, Public Works and Transportation anticipates that all autonomous vehicles operated in the District will have a fuel economy rating of 44 MPG or higher.

A summary of the proposed community benefits as submitted by the Committee on the Environment, Public Works and Transportation is attached to this analysis as Attachment A.

#### Financial Analysis for Development Projects

1. Review and Analysis of the Financing Proposal Including Advisory Opinion Stating Whether or Not It is Likely that the Project Could Be Financed Without the Proposed Exemption or Abatement

The OCFO finds that the minimal savings, if any, to the autonomous vehicle owner of this motor fuel tax exemption are unlikely to have an effect on a car buyer's decision to purchase or operate an autonomous vehicle in the District.

2. Estimate of the Amount of Exemption or Abatement Necessary to Enable the Project to Be Financed

None

3. Assessment of the Developer's Documentation of Efforts to Seek Alternate Financing and the Factors that Limit the Developer's Ability to Obtain Adequate Financing

Not Applicable

#### Attachment A

# **Summary of Proposed Community Benefits**

## Submitted by the Committee on the Environment, Public Works, and Transportation

Through the Autonomous Vehicle Act, the District will join a growing number of states that allow vehicles without drivers to travel on their roads. Autonomous vehicles will provide many benefits to District residents, including improving mobility for persons with disabilities, reducing congestion, increasing the road capacity, improving traffic safety, and improving the availability of on-street parking.

Initially autonomous vehicles will operate with a licensed driver prepared to take control of the vehicle. However, once the operational safety of the vehicles is proven, a licensed driver will no longer be needed.

This legislation also anticipates the increasing shift to alternative fueled vehicles. As more non-gas-powered vehicles enter the District, the amount of motor fuels tax, which is used to maintain roads, collected will continue to decrease. Therefore, this bill would impose a fee equivalent to the motor fuels tax on non-gas-powered vehicles based upon vehicle miles traveled (VMT). The proposed VMT rate is \$.01875 per mile travelled, which is equivalent to what a 44 mile per gallon (MPG) vehicle would pay in motor fuels taxes to travel a mile.